nci 0 8 2002	•	•	Sheet <u>1</u>	_ of <u>च</u>
Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 06497-013002	Application No. 10/048,186	CEN
thrormation Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant James C. Liao		ER 1
		Filing Date January 25, 2002	Group Art Unit 1652	600/29

	U.S. Patent Documents						
Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
R	AA	5,429,939	07-04-95	Misawa et al.	435	67	
RP	AB	5,530,189	06 25 96	Ausich et al.	800	205	
RS	AC	5,744,341	04/28/98	Cunningham, Jr. et al.	435	189	
R	AD	5,906,925	05/25/99	Liao	435	72	1
	AE						

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig.	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Trans Yes	lation No
Initial	AF	Namber	Date	ratent Onice	Class	Subclass	165	INO

	Other D	ocuments (include Author, Title, Date, and Place of Publication)		
Examiner	Desig.			
Initial	ID	Document		
PP	AG	Campos-García et al., "The pseudomonas aeruginosa rhlG gene encodes an NADPH-dependent B- Ketoacyl which is specifically involved in rhamnolipid synthesis", Journal of Bacteriology 180 (17):4442-4451 (1998)		
R	АН	Farmer et al., "Reprogramming the regulatory circuits of Escherichia coli", Abstract 083., American Chemical Society National Meeting, Boston, MA August 23-27 (1998)		
RP	AI	Farmer et al., "Reprogramming the regulatory circuits of Escherichia coli", Abstract 094., American Chemical Society National Meeting, Anaheim, CA March 21-25 (1999)		
RP	AJ Feng et al., "Role of phosphorylated metabolic intermediates in the regulation of glutam synthetase synthesis in Escherichia coli", Journal of Bacteriology 174(19):6061-6070 (1			
EP	AK	Haldimann et al., "Transcriptional regulation of the Enterococcus faecium BM4147 vancomycin resistance gene cluster by the VanS-VanR two-component regulatory system in Escherichia coli K-12", Journal of Bacteriology 179(18):5903-5913 (1997)		
RP	AL	McCleary et al., "Acetyl phosphate a global signal in Escherichia coli?", Journal of Bacteriology 175(10):2793-2798 (1993)		
RP	AM	McCleary et al., "Acetyl phosphate and the activation of two-component response regulators", Journal of Biological Chemistry 269(50):31567-31572 (1994)		
R	AN	Misawa et al., "Elucidation of the <i>Erwinia uredovora</i> carotenoid biosynthetic pathway by functional analysis of gene products expressed in <i>Escherichia coli</i> ", <i>Journal of Bacteriology</i> 172(12):6704-6712 (1990)		
R	AO	Ruther et al., "Production of zeaxanthin in Escherichia coli transformed with different carotenogenic plasmids", Appl Microbiol Biotechnol 48:162-167 (1997)		
R				

Examiner Signature Rebecca Pourly	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if no next communication to applicant.	of in conformance and not considered. Include copy of this form with

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No	Application No. 10 048,186		
	by Applicant (Use several sheets if necessary)		Applicant James C. Liao		
			Group Art Unit 1652		

	Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner Initial	Desig.	Document
		Scroeckh et al., "The use of elements of the <i>E. coli</i> Ntr-system for the design of an optimized recombinant expression system for high cell density cultivations", <i>Journal of Biotechnology</i> 75:241-250 (1999)
R	AR	Shin et al., "Modulation of flagellar expression in <i>Escherichia coli</i> by acetyl phosphate and the osmoregulator OmpR", <i>Journal of Bacteriology</i> 177(16):4696-4702 (1995)
RP	AS	Sprenger et al., "Identification of a thiamin-dependent synthase in <i>Escherichia coli</i> required for the formation of the 1-deoxy-D-xylulose 5-phosphate precursor to isoprenoids, thiamin, and pyridoxol", <i>Proc. Natl. Acad. Sci USA</i> 94:12857-12862 (1997)
K	AT	Wang et al., "Engineered Isoprenoid pathway enhances Astaxanthin production in Escherichia coli", Biotechnology and Bioengineering 62(2):235-241 (1999)

RECEIVED

OCT 1 1 27 1

TECH CENTER 1600/2900

Examiner Signature

Date Considered

Telbecca Young 2/18/64

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Susstitute Form PTO-1449 (brodified) **Information Disclosure Statement** MAY 1 9 2003

U.S. Department of Commerce Patent and Trademark Office

by Applicant (Use several sheets if necessary)

Application No RECEIVED Attorney's Docket No. 06497-013002

Applicant

James C. Liao

MAY 2 2 2003

Filing Date June 19, 2002

Group Art Unit 1652 TECH CENTER 1600/2900

1 NACO							
U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	BA						

Foreign Patent Documents or Published Foreign Patent Applications							
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation Yes No
	BB						

(Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner	Desig.	
Initial	ID	Document
R	ВС	Alex and Simon, "Protein histidine kinases and signal transduction in prokaryotes and eukaryotes", Trends in Genetics 10(4):133-138 (1994)
W	BD	Aristidou et al., "Metabolic engineering of Escherichia coli to enhance recombinant protein production through acetate reduction", Biotechnol. Prog. 11:475-478 (1995)
BE BF		Bauer et al., "Improved expression of human interleukin-2 in high-cell-density fermentor cultures of Escherichia coli K-12 by a phosphotransacetylase mutant", Appl Environ Microbiol. 56(5):1296-1302 (1990)
		DeWitt et al., This Month in Nature Biotechnology, Nature Biotechnology 18:480 (2000)
C	BG	Diez-Gonzalez and Russell, "The ability of Escherichia coli O157:H7 to decrease its intracellular pH and resist the toxicity of acetic acid", Microbiology 143:1175-1180 (1997)
R	вн	Farmer and Liao, "Improving lycopene production in Escherichia coli by engineering metabolic control," Nature Biotechnol. 18:533-537 (2000)
Cl	BI	Hakenbeck and Stock, "Analysis of Two-Component Signal Transduction Systems Involved in Transcriptional Regulation", Methods in Enzymology 273:281-301 (1996)
ll	ВЈ	Parkinson and Kofoid, "Communication Modules in Baterial Signaling Proteins", Annu. Rev. Genet. 26:71-112 (1992)
RP	вк	Sevenich et al., "DNA binding and oligomerization of NtrC studied by fluorescence anisotropy and fluorescence correlation spectroscopy", Nucleic Acid Res. 26(6):1373-1381 (1998)

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

JUL 2 1 2003

Sheet <u>1</u> of <u>1</u>

\ % ,			
Substitute Form PTO-1449 TRADE 3. Department of Commerce (Modified)	Attorney's Docket No. 06497-013002	Application No. 10/048,186	
Information Disclosure Statement by Applicant	Applicant James C. Liao		
(Use several sheets if necessary) (37 CFR §1.98(b))	Filing Date June 19, 2002	Group Art Unit 1652	

			U.S. Paten	t Documents				
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate	
i iiii di	CA		34,0					
	СВ							
	СС							1
	CD					R	OUL 2 3 2003	
	CE						2 3 2003	
	CF						JUL 2 0 -	
	CG					TECH	CENTER 1600	29(
	СН					1201		
	CI							
	CJ							
	CK							

Foreign Patent Documents or Published Foreign Patent Applications									
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation		
							Yes	No	
	CL							ļ	
	СМ								
	CN								
	СО	•							
	СР								

Other Documents (include Author, Title, Date, and Place of Publication)						
Examiner	Desig.					
Initial	ID_	Document				
R	CQ	Reitzer et al., "Expression of glnA in Escherichia coli is regulated at tandem promoters", Proc. Natl. Acad. Sci. USA 82:1979-1983 (1985)				
RP	CR	Wanner et al., "Involvement of Phosphotransacetylase, Acetate Kinase, and Acetyl Phosphate Synthesis in Control of the Phosphate Regulon in Escherichia coli", J. Bacteriol. 174(7):2124-2130 (1992)				
	CS					
	CT					

Examiner Signature Rebecca Rou								
EXAMINER: Initials citation considered. Draw line through (itation if not in conformance and not considered. Include copy of this form with next communication to applicant.								
	Substitute Disclosure Form (PTO-1449)							